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UNION CARBIDE CORPORATION 39 OLD RIDGEBURY ROAD, DANBURY, CT 06817-0001

September 21, 1992

8EHQ-92-12233

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED INIT

A

Document Processing Center (TS-790)
Room L-100
Office of Toxic Substances
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

Attn: Section 8(e) Coordinator (CAP Agreement)

Re: CAP Agreement Identification No. 8ECAP-0110

Dear Sir or Madam:

Union Carbide Corporation ("Union Carbide") herewith submits the following reports pursuant to the terms of the TSCA §8(e) Compliance Audit Program and Union Carbide's CAP Agreement dated August 14, 1991 (8ECAP-0110). These reports describe environmental toxicity and/or fate and effects studies for a variety of chemical substances which meet Union Carbide's TSCA 8(e) CAP reporting criteria for such studies. A copy of the reporting guidelines used by Union Carbide for environmental toxicity and for fate/effects studies will be furnished to the Agency with the final report of Phase 1 of CAP.

- (1) Summary of Ecological Fate/Effects Data on UCC&P Materials", Memorandum, Union Carbide Chemicals and Plastics Company Inc., by R. L. Blessing, M. Raghuram, G. T. Waggy, June 16, 1992 [attached are two documents: "Ecological Effects Data on Carbide Products and Process Chemicals: All Database Entries" (28 pages), 06/12/92; and; Appendix A: (a) "Summary of Ecological Fate and Effects Data on Selected TRITON® Products", 06/15/92; and (b) "Ecological Fate/Effects on TERGITOL® Surfactants", 3 pages, 6/15/92]. [This is a printout report from the Union Carbide "Ecological Effects Database". All data points refer to previous studies. In most cases the reports which originally contained these data points are not available. A few reports have, or will be, sent to the Agency in separate submissions. If in the future individual reports are located, they will

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be promptly sent to the Agency as a supplement to this submission. Also, nonreportable data is redacted from this report. Reportable entries are on Table pages 2, 5, 7, 13, 17, 18, 19, 24, and 27 of this 28 page report, and Appendix A, pages 1, 3 (of 3 pages). All other pages had no entries which merited reporting.]

- (2) "Environmental Impact Product Analysis: Acute Aquatic Toxicity Testing", Research and Development Dept., Chemicals and Plastics, Union Carbide Corp. , Project Report, File No. 19133, January 25, 1974. [As described above, nonreportable data is redacted from this report. Reportable data, in Tables I through VII, are on (Tables) page 2, 6, 8 and 13 of this 16 pages set of Tables. All other Table pages had no entries which merited reporting.]

A Complete summary of this reports are attached.

Previous TSCA Section 8(e) or "FYI" Submission(s) related to this substance are:

(None, from the viewpoint of environmental effects.)

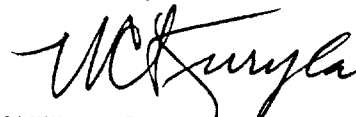
Previous PMN submissions related to this substance are:

P88-1744 (for Silicone 38184 (a) and (b))

This information is submitted in light of EPA's current guidance. Union Carbide does not necessarily agree that this information reasonably supports the conclusion that the subject chemical presents a substantial risk of injury to health or the environment.

In the attached reports the term "CONFIDENTIAL" may appear. This precautionary statement was for internal use at the time of issuance of these reports. Confidentiality is hereby waived for purposes of the needs of the Agency in assessing health and safety information. The Agency is advised, however, that the publication rights to the contained information are the property of Union Carbide.

Yours truly,



William C. Kuryla, Ph.D.
Associate Director
Product Safety
(203/794-5230)

WCK/cr

Attachment (3 copies of cover letter, summary, and reports)

UNION CARBIDE CHEMICALS AND PLASTICS COMPANY INC.
CENTRAL ENGINEERING AND TECHNOLOGY
HEALTH, SAFETY & ENVIRONMENTAL TECHNOLOGY
PO BOX 8361
SOUTH CHARLESTON, WV 25303-0361

MEMORANDUM

June 16, 1992

TO: Recipients of Fate/Effects Data (attached List)

FROM: R. L. Blessing, 511 - 770/345
M. Raghuram, 511 - 770/350 (3 copies)
G. T. Waggy, 511 - 770/350 (10 copies)

SUBJECT: Summary of Ecological Fate/Effects Data on UCC&P Materials

The attached computer printout summarizes the available ecological fate and effects data on over 600 Carbide products, process chemicals, raw materials, and some former products. These have been collected in various projects over the past 20 years. Additional product tests have been added to the system and several corrections have been made in the data. The available F/E data on TRITON® and TERGITOL® surfactants are attached as Appendix A. Some of these data have not been added to the data bank.

A few limitations in the data report form still exist as noted below:

- A value of 1 in the BOD area currently means 0% biooxidation.
- 95% confidence limits on toxicity measurements are not included in this printout.
- Acclimated BOD data is identified by an A prior to the 5-day value. The other BOD data series are nonacclimated.
- Any chemical name starting with a numeral will appear at the end after the materials without numerals. Also, those materials starting with n or N appear in the N placement.
- Under aquatic effects, RF means range-finding tests.
- GLP after the test means it was conducted in compliance with Good Laboratory Practice regulations.

Please contact G. T. Waggy at UNICOM 8-721-4149, R. L. Blessing at 8-721-5850, or M. Raghuram at 8-721-3721 if you have any questions on these data or suggested corrections.

Important. Do not release this list in its entirety. It is very valuable to UCC&P. Release the data on individual products to those having a need.

GTW92.050/sj
Attachments

BUSINESS
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SUMMARY

<u>CHEMICAL</u>	<u>CASRN</u>	<u>REASON FOR CAP REPORTING</u>
Amine 220	✓ 95-38-5	Minnow toxicity and lack of significant biodegradability (+ environmental exposure potential)
Crude Myrac Aldehyde	✓ 37677-14-8 (?)	Daphnia toxicity, lack of reasonable biodegradability (+environmental exposure potential)
Dicyclopentadiene	✓ 77-73-6	Total toxicity (+ environmental exposure potential)
Polymer JR & Polymer LR	✓ 68610-92-4	Minnow & daphnia toxicity (+environmental exposure potential)
Silicone 38184 (a)	unknown ^{None} (3)(a)	Minnow & daphnia toxicity, apparent lack of biodegradability with <u>unacclimated</u> organisms, antibacterial action (+ environmental exposure potential)
Silicone 38184 (b)	unknown (3)(b)	
TERGITOL® Min-Foam 1X,2X	✓ 68551-14-4	Minnow & daphnia toxicity, apparent lack of biodegradability with <u>unacclimated</u> organisms (+ environmental exposure potential)
TERGITOL® NP-14	127087-87-0	Minnow toxicity and apparent lack of biodegradability with <u>unacclimated</u> organisms (+ environmental exposure potential)
UCARE® Polymer 15712-32, 17712-41	(2) NONE	Minnow and daphnia toxicity, apparent lack of biodegradability with <u>unacclimated</u> organisms (+ environmental exposure potential)

<u>CHEMICAL</u>	<u>CASRN</u>	<u>REASON FOR CAP REPORTING</u>
TRITON® DF-AZ	(1) none	Minnow and daphnia toxicity (+ environmental exposure potential)
Chlororacetone	✓ 78-95-5	Bacterial inhibition against <u>non-acclimated</u> organisms (+ environmental exposure potential)
Ethyl Isopropyl Ketone	25044-01-3	Bacterial inhibition against <u>non-acclimated</u> organisms (+ environmental exposure potential)
Vanadium Pentoxide	✓ 1314-62-1	Bacterial inhibition against <u>non-acclimated</u> organisms (+ environmental exposure potential)
Crotonaldehyde	✓ 4170-30-3	Bacterial inhibition against <u>non-acclimated</u> organisms and Minnow toxicity (+ environmental exposure potential)
(1) Mixture: polyethoxylated alcohol ether (CASRN 70321-56-1)~80%; phenol-formaldehyde polymer (CASRN 9003-35-4)~10%; water (CASRN 7732-18-5)~10%. ✓		
(2) Composition and CASRN are unavailable.		
(3) (a) is a mixture of quaternary alkylamine - pendant polysiloxane — CONFIDENT (P88-1774)~75% and propylene glycol (CASRN 57-55-6)~25%; ✓		
(b) is essentially 100% of a quaternary alkylamine - pendant polysiloxane — CONFIDENT (P88-1774).		

JUNE 1992
UPDATED F/E
DATABASE

ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES

CAS NO.	CHEMICAL NAME	SPECIES	TEST	CONC. (MG/L)	LOG P OCT/H2O MEAS.	LOG P OCT/H2O ESTIM.	THOD (MG/MG) MEAS. CALC.	BIODEGRADATION (%) Day 5 Day 10 Day 20
95385	AMINE 220	FATHEAD	LC50	0.2			2.78	5

ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES

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CAS NO.	CHEMICAL NAME	Species	Test	Conc. (mg/L)	LOG P OCT/H2O Meas.	LOG P OCT/H2O Estim.	THOD (mg/mg) Meas. Calc.	BIODEGRADATION (%) Day 5 Day 10 Day 20
78955	CHLOROACETONE	BACTERIAL/NA	LC50	3	0.27			
4170303	CROTONALDEHYDE	FATHEAD	LC50	2.8			2.28	51 60 70
		BACTERIAL/NA	IC50	25-50				
	CRUDE MYRAC ALDEHYDE	DAPHNIA	LC50	1.6			2.40	8 15
		BACTERIAL/NA	IC50	300				
77736	DICYCLOPENTADIENE	FATHEAD	LC50	30 RF			2.30 3.15	2
		DAPHNIA	LC50	13				
		BACTERIAL/NA	IC50	>200				

ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES

PAGE 7
06/12/92

CAS NO.	CHEMICAL NAME	Species	ECOLOGICAL TOXICITY Test Conc. (mg/L)	LOG P OCT/H2O Meas.	LOG P OCT/H2O Meas.	THOD (mg/mg) Mess. Calc.	BIODEGRADATION (%) Day 5 Day 10 Day 20
25044013	ETHYL ISOPROPENYL KETONE	FATHEAD DAPHNIA BACTERIAL/NA	LC50 23.1 LC50 16.2 IC50 37			2.03	15 57 68

**ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES**

CAS NO.	CHEMICAL NAME	ECOLOGICAL TOXICITY		LOG P		THOD (mg/mg)	BIODEGRADATION (%)			
		Species	Test	Conc. (mg/L)	OCT/H2O Meas.		OCT/H2O Estim.	Day 5	Day 10	Day 20
POLYMER JR400		DAPHNIA	LC50	27.8		1.10	1.10	5	5	5
		FATHEAD	LC50	2.4						
		BACTERIAL/NA	IC50	2500						
		FATHEADS	LC50	19.7		1.27				1
		FATHEADS	LC50	5.2 (?)						
POLYMER LR400		DAPHNIA	LC50	670						

ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES

CAS NO.	CHEMICAL NAME	Species	Test	Conc. (mg/L)	LOG P OCT/H2O Meas.	LOG P OCT/H2O Estim.	THOD (mg/mg) Meas. Calc.	BIODEGRADATION (%) Day 5 Day 10 Day 20
		FATHEAD	LC50	1.8				
		DAPHNIA	LC50	9.0			1.65	5 9 8
	SILICONE 38184(b)	BACTERIAL/NA	IC50	16				
		FATHEAD	LC50	2.8			1.44	1 1 6
		DAPHNIA	LC50	1.2				
	SILICONE 38184(a)	BACTERIAL/NA	IC50	75				

CAS NO.	CHEMICAL NAME	ECOLOGICAL TOXICITY		LOG P		THOD (mg/mg) Meas. Calc.	BIODEGRADATION (%)	
		Species	Test	Conc. (mg/L)	OCT/H2O Meas.		OCT/H2O Estim.	Day 5
		DAPHNIA	LC50	3.5			9	16
		FATHEAD	LC50	4.0			AS	16
		BACTERIAL/NA	IC50	>1000		2.20	7	23
	TERGITOL MIN-FOAM 1X						5	23
		FATHEAD	LC50	2.6			17	25
		DAPHNIA	LC50	1.77		2.34	5	16
		FATHEAD	LC50	0.9			5	23
	TERGITOL MIN-FOAM 2X	BACTERIAL/NA	IC50	>1000			5	18

ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES

CAS NO.	CHEMICAL NAME	SPECIES	ECOLOGICAL TOXICITY Test	Conc. (mg/L)	LOG P OCT/H2O Meas.	LOG P OCT/H2O Estim.	THOD (mg/mg) Meas. Calc.	BIODEGRADATION (%) Day 5 Day 10 Day 20
TERGITOL NP-14		FATHEAD	LC50	1.6			2.45	1 2 2

ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES

CAS NO.	CHEMICAL NAME	Species	ECOLOGICAL TOXICITY Test Conc. (mg/L)	LOG P OCT/H2O Meas.	LOG P OCT/H2O Estim.	THOD (mg/mg) Meas. Calc.	BIODEGRADATION (%) Day 5 Day 10 Day 20
UCARE POLYMER 15712-32		FATHEAD	LC50	4.9		1.85	2 2 5
		DAPHNIA	LC50	88.4			
		BACTERIAL/NA	IC50	>5000			
UCARE POLYMER 15712-41		FATHEAD	LC50	6.2		1.95	2 2 5
		DAPHNIA	LC50	74.3			
		BACTERIAL/NA	IC50	>5000			

ECOLOGICAL EFFECTS DATA
ON
CARBIDE PRODUCTS AND PROCESS CHEMICALS
ALL DATABASE ENTRIES

CAS NO.	CHEMICAL NAME	Species	Test	Conc.(mg/L)	LOG P OCT/H2O Meas.	LOG P OCT/H2O Estm.	THOD (mg/mg) Meas. Calc.	BIODEGRADATION (%) Day 5 Day 10 Day 20
1314621	VANADIUM PENTOXIDE							

1314621 VANADIUM PENTOXIDE BACTERIAL/NA IC50 42

APPENDIX A

SUMMARY OF ECOLOGICAL FATE AND EFFECTS DATA
ON SELECTED TRITON® PRODUCTS

		20 DAY BOD	OECD BIODEGRADATION TESTS		AQUATIC TOXICITY		
			28 day Closed Bottle	28 day screening			
Material Evaluated	ThOD mg/mg	BOD as % ThOD	BOD as % ThOD	% DOC Removal	Fathead (96-hour)	Daphnia (48-hour)	Bacterial Inhibition
	Meas Calc	5/10/15/20	5/15/28	7/14/21/28	LC50/ NOEC	EC50/ NOEC	IC50
LOW FOAM SURFACTANTS							

Triton® DF-AZ	2.01	21/50/68/86	9/21/61*	5/44/66/71	0.7/0.3	2.4/1.3	
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ECOLOGICAL FATE / EFFECTS DATA ON TERGITOL® SURFACTANTS

ECOLOGICAL FATE / EFFECTS DATA ON TERGITOL® SURFACTANTS										
			20 Day BOD		OECD Biodegradation Tests				Effects Testing, mg/L (95% CL)	
					28 day Closed Bottle		28 day Screening			
Product	ThOD mg/mg	BOD as % ThOD			Activated Sludge, %	BOD as % ThOD	% DOC Removal	Bacterial	Fathead	Daphnia
		Day 5	Day 10	Day 20						
Evaluated	Meas Calc					5/15/28	7/14/21/28	IC50	96H LC50	48H LC50

Min Foam1X	2.2	2.24	7	23	23	96	96	>1000	4.0(3.5-4.5)	3.5(2.5-5.0)
Min Foam 2X		2.34	5	18	28			>1000	2.6(2.1-3.2)	1.8(1.3-2.5)

ENVIRONMENTAL IMPACT PRODUCT ANALYSIS
ACUTE AQUATIC TOXICITY TESTING

AUTHORS: G. T. Waggy (15)
J. R. Payne

DATE: January 25, 1974

PROJECT NO.: 910F44

SUPERVISOR: J. C. Hovious (2)

FILE NO.: 19133

SUMMARY The product aquatic-toxicity project of the Environmental Impact Analysis program has been completed and this report summarizes the data collected on 217 products. Definitive test data are presented on 210 products and range-finding values are included on 7 products which were not tested by the definitive procedure. The test data show that, in general, the surfactants are the most toxic family of products evaluated, followed by acrylates, alkylamines, aldehydes, acids, aromatics and esters. Only 17 of the products tested showed aquatic toxicity (LC50) values below 10 mg/l. Since this study was designed to evaluate the immediate effect of accidental or controlled discharges of chemicals on aquatic life, no pH adjustment or supplementary solvents were used. Although most of the values were obtained using adult fathead minnows as the test organism, some comparative test results using fathead fry have been included to show the higher degree of sensitivity exhibited by the young fish. Some toxicity values comparing the sensitivity and reliability of brine shrimp as a test organism with the fathead minnows have been included for guidance in considering the use of brine shrimp as an "off-the-shelf" routine aquatic toxicity test. The aquatic toxicity testing facilities will be maintained at this location for some additional product evaluations and for effluent testing which is being required at several of our plants.

INTRODUCTION The acute aquatic toxicity testing of over 200 Union Carbide products has been one part of the Environmental Impact Analysis (EIA) program in which the total potential environmental effect of producing and marketing the major UCC chemicals is being examined. The information obtained from the EIA program will be utilized in both long-range planning for new and existing units and in service to concerned customers. The product evaluation program is being managed by Dr. G. F. Johnson under the general direction of Mr. H. R. Guest.

The study reported herein employed fathead minnows and was limited to static acute testing of the fish, i.e. the determination of the short-term, median lethal concentrations of specific compounds. The testing procedures were presented in detail in the initial report on this project (1), and only slight modifications were required as discussed in subsequent reports on the project (2, 3). The bioassay procedures generally followed the techniques recommended in Standard Methods (4) and tentative procedures obtained from research committees working in this field (5, 6, 7). The brine shrimp information included in this report for comparison with fathead minnow values was obtained from a related project completed and reported in March, 1972 (8).

DISCUSSION This report serves as a summary of the bioassay data collected during this program (Tables I and II). The important test conditions are presented in Table III. Fathead minnows (Pimephales promelas) were selected as the test organisms for this study. Initially it was planned to test only fry (young fish) because of the smaller testing equipment and facilities involved. This decision necessitated a culturing system required six to ten months to equip and develop into a productive minnow supply system (9). During this period testing gradually switched to adult fish obtained from commercial suppliers because of the discontinuous supply of fry. The health of the fry was also a factor, since prophylactic medical treatment was not desirable with the younger fish. Comparative test data shown in Table IV indicate a somewhat higher sensitivity for the fry.

The definitive LC50 (lethal concentration, 50%) data are presented in Table I by family classification. A review of these families shows that the TERGITOL surfactants were the most toxic family of products evaluated. This product family is followed closely in toxicity by acrylates, alkylamines, aldehydes, acids, aromatics and esters. Seventeen of the 218 products tested showed LC50 values less than 10 mg/l in Table V. The glycols and glycol ethers represent families of products that can be tolerated by aquatic organisms at relatively high concentrations.

The LC50 information generated in this program generally correlates well with the limited number of available literature values. Although partial kills were not obtained in all test series, the LC50 values were considered "definitive" data since all test concentrations were over a rather narrow range.

Since the purpose of this study was to evaluate the environmental effects of accidental and controlled discharges of chemical products, no pH adjustment was employed and no supplementary solvents were used to solubilize products of limited water-solubility. The buffering capacity of the receiving waters certainly would be an important factor in pH-related toxicity problems, especially for potential downstream fish kills as opposed to highly localized toxicity effects.

The initial toxicity testing involved the use of range-finding procedures which used 2 fish in 1.5 liters of dilution water. A broad range (10 to 10,000 mg/l) of product concentrations were set up in about 5 wide mouth half-gallon bottles prior to the introduction of the fish. The test period was about 24 hours under conditions of controlled aeration. This rather quick test allowed the determination of the approximate toxic level of a material so that the definitive test could be conducted over a narrow dosage range. The definitive tests utilized 18.5 liters of dilution water with 10 fish per test vessel under minimal controlled aeration (dissolved oxygen was maintained above 5 mg/l). The test duration was 96 hours. The definitive LC50 data are presented in Table I along with the approximate initial pH of the dilution water at the LC50 chemical concentration. Although range-finding values were determined on all the products tested only a few range-finding values are presented in this report (Table II). These are for those products, which for various reasons, were not evaluated by the definitive procedure.

The test results presented in Table VI indicate a high level of reproducibility for this LC50 data. Of course, the reproducibility of this type of measurement is highest when a single laboratory is doing the work and using fish from the same source. The high values reported for morpholine and monoethanolamine reflect a precipitation problem experienced early in the testing program. Some of the amines were precipitating during the test due to the presence of a small amount of phosphate buffer in the system.

The use of phosphate buffer to adjust the pH of the dilution water arose from the water conditioning method in the fish culturing system which supplied the test water for the early LC50 tests. Once the precipitation problem was noted in the amine tests, the water preparation was changed to simply passing the water through activated carbon to remove the chlorine, followed by pH adjustment using dilute hydrochloric acid and sodium hydroxide. Although this eliminated the precipitation problem, it was necessary to repeat several determinations to insure that the slightly buffered test system had not effected the previous LC50 data to a significant degree. Both amines and acids were included in this retesting which involved about eight to ten products. Any changes in values are reflected in the definitive data presented in this report.

The fathead minnow aquatic toxicity data generated in this program have been compared in Table VII with some previous brine shrimp bioassay data. Although the brine shrimp test is not accepted by any regulatory agency as a measure of toxicity of a material to fresh water organisms, it does appear to yield generally similar values and should have application as a simple, "off-the-shelf" aquatic toxicity indicator for routine checks on effluents or for screening materials for potential problems. In fact, several improvements in the brine shrimp test have been made since these data were generated, and the agreement between the values for the two organisms may improve as these changes are incorporated in future tests.

The aquatic toxicity facilities in Building 785 will be maintained for a limited program of additional product testing and for plant effluent testing. Effluent testing will probably increase, since EPA now requires periodic aquatic toxicity tests on treatment plant effluents.

CONCLUSIONS

1. Definitive LC50 data are now available on about 200 Union Carbide products.
2. Suitable procedures and facilities for range-finding and definitive bioassay tests are now available at this location. Considerable experience has been gained in bioassay techniques and in maintaining a healthy supply of fish for testing.
3. Approximately ten percent of the products tested showed LC50 values of less than 10 mg/l. Only three products showed LC50 of less than 1 mg/l.
4. Based on a comparison of these LC50 values and previous brine shrimp data, the brine shrimp test method could be a suitable technique for screening products and effluents for potential problems. This would be especially useful where fish and fish-bioassay facilities are not readily available.

BIBLIOGRAPHY

- (1) Waggy, G. T., Lashley, E. R. and Gossett, R. G., "Environmental Impact Product Analysis, Acute Aquatic Toxicity Testing," R/D Project Report (18497), June 21, 1973.
- (2) Waggy, G. T., Worcheck, R. A., "Environmental Impact Product Analysis, Acute Aquatic Toxicity Testing," R/D Project Report (18703), August 27, 1973.

- (3) Waggy, G. T., Worcheck, R. A., "Environmental Impact Product Analysis, Acute Aquatic Toxicity Testing," R/D Project Report (18857), October 15, 1973.
- (4) Standard Methods for the Examination of Water and Wastewater, 13th Edition, 1971, Published by APHA, AWWA, and WPCF.
- (5) Unpublished tentative procedure from an Ad Hoc industrial-regulatory committee working on bioassay procedures.
- (6) Biological Water Quality Committee, "ORSANCO 24-Hour Bioassay Procedure," 1973.
- (7) Pickering, Q. H. and Henderson, C., "Acute Toxicity of Some Important Petrochemicals to Fish," Journal Water Pollution Control Federation, 38, 1419-29 (1966).
- (8) Price, K. S., "Technology Program - Group I Physical Distribution, Evaluation of Deep-Water Disposal of Tanker Washings," R/D Project Report (16948), March 16, 1972.
- (9) Gossett, R. G., and Waggy, G. T., "Environmental Impact Product Analysis, Development of a Fathead Minnow Stock Culture Unit," R/D Project Report (18717), September 4, 1973.

G. T. Waggy
G. T. Waggy

Attachments
7 Tables

Manuscript Date: January 18, 1974
Typed: January 21, 1974
lkb

TABLE I (Continued)

2

<u>Product Tested</u>	<u>Initial pH Range</u>	<u>LC50, mg/l (Dosage Basis)</u>		
		<u>24-hr</u>	<u>48-hr</u>	<u>96-hr</u>
Crotonaldehyde	7.5-7.6	2.8	2.8	2.8

TABLE I (Continued)

6

<u>Product Tested</u>	<u>Initial pH Range</u>	<u>LC50, mg/l (Dosage Basis)</u>		
		<u>24-hr</u>	<u>48-hr</u>	<u>96-hr</u>
Amine 220	7.6	0.2	0.2	0.2

TABLE I (Continued)

8

<u>Product Tested</u>	<u>Initial pH Range</u>	<u>LC50, mg/l (Dosage Basis)</u>		
		<u>24-hr</u>	<u>48-hr</u>	<u>96-hr</u>
<u>TERGITOL</u>				
Minfoam 2X	7.9	0.9	0.9	0.9
NP-14 -	7.3	1.8	1.6	1.6

TABLE V
PRODUCTS HAVING LC50 VALUES LESS THAN 10 MG/L

<u>Product</u>	<u>LC50, mg/l (Dosage Basis)</u>		
	<u>24-hr</u>	<u>48-hr</u>	<u>96-hr</u>
Amine 220	0.2	0.2	0.2
TERGITOL Min-Foam 2X	0.9	0.9	0.9
TERGITOL NP-14	1.8	1.6	1.6
Crotonaldehyde	2.8	2.8	2.8



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

William C. Kuryla, Ph.D.
Associate Director, Product Safety
Union Carbide Corporation
39 Old Ridgebury Road
Danbury, Connecticut 06817-0001

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

DEC 27 1994

EPA acknowledges the receipt of information submitted by your organization under Section 8(e) of the Toxic Substances Control Act (TSCA). For your reference, copies of the first page(s) of your submission(s) are enclosed and display the TSCA §8(e) Document Control Number (e.g., 8EHQ-00-0000) assigned by EPA to your submission(s). Please cite the assigned 8(e) number when submitting follow-up or supplemental information and refer to the reverse side of this page for "EPA Information Requests".

All TSCA 8(e) submissions are placed in the public files unless confidentiality is claimed according to the procedures outlined in Part X of EPA's TSCA §8(e) policy statement (43 FR 11110, March 16, 1978). Confidential submissions received pursuant to the TSCA §8(e) Compliance Audit Program (CAP) should already contain information supporting confidentiality claims. This information is required and should be submitted if not done so previously. To substantiate claims, submit responses to the questions in the enclosure "Support Information for Confidentiality Claims". This same enclosure is used to support confidentiality claims for non-CAP submissions.

Please address any further correspondence with the Agency related to this TSCA 8(e) submission to:

Document Processing Center (7407)
Attn: TSCA Section 8(e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
Washington, D.C. 20460-0001

EPA looks forward to continued cooperation with your organization in its ongoing efforts to evaluate and manage potential risks posed by chemicals to health and the environment.

Sincerely,

Terry R. O'Bryan
Terry R. O'Bryan
Risk Analysis Branch

Enclosure

12233 A



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Triage of 8(e) Submissions

AUG 24 1985

Date sent to triage: _____

NON-CAP

CAP

Submission number: 12233A

TSCA Inventory:

Y

N

D

Study type (circle appropriate):

Group 1 - Dick Clements (1 copy total)

ECO

AQUATO

Group 2 - Ernie Falke (1 copy total)

ATOX

SBTOX

SEN

w/NEUR

Group 3 - Elizabeth Margosches (1 copy each)

STOX

CTOX

EPI

RTOX

GTOX

STOX/ONCO

CTOX/ONCO

IMMUNO

CYTO

NEUR

Other (FATE, EXPO, MET, etc.): _____

Notes:

THIS IS THE ORIGINAL 8(e) SUBMISSION; PLEASE REFILE AFTER TRIAGE DATABASE ENTRY

*no comments were found
Please evaluate.*

For Contractor Use Only

entire document:

0

1

2

pages

1,2

pages

1-5, tab

Notes:

Contractor reviewer :

LPS

Date:

11/21/94.

CECATSVIRIAGE TRACKING DBASE ENTRY FORM

CECATS DATA:

Submission # 8ELHQ-0992-12233 SEQ. A

TYPE: INT SUPP FLWP

SUBMITTER NAME: Union Carbide
Corporation

INFORMATION REQUESTED: FLWP DATE:

0501 NO INFO REQUESTED

0502 INFO REQUESTED (TECH)

0503 INFO REQUESTED (VOL. ACTIONS)

0504 INFO REQUESTED (REPORTING RATIONALE)

DISPOSITION:

0639 REFER TO CHEMICAL SCREENING

0678 CAP NOTICE

VOLUNTARY ACTIONS:

0401 NO ACTION REPORTED

0402 STUDIES PLANNED/UNDERWAY

0403 NOTIFICATION OF WORKER/OTHERS

0404 LABEL/MSDS CHANGES

0405 PROCESS/HANDLING CHANGES

0406 APPAUSE DISCONTINUED

0407 PRODUCTION DISCONTINUED

0408 CONFIDENTIAL

SUB. DATE: 09/21/92 OTS DATE: 09/29/92 CSRAD DATE: 08/19/94

CHEMICAL NAME:

CAS#

SEE ATTACHED

INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C	INFORMATION TYPE:	P F C
0201 ONCO (HUMAN)	01 02 04	0216 EPI/CLIN	01 02 04	0241 IMMUNO (ANIMAL)	01 02 04
0202 ONCO (ANIMAL)	01 02 04	0217 HUMAN EXPOS (PROD CONTAM)	01 02 04	0242 IMMUNO (HUMAN)	01 02 04
0203 CELL TRANS (IN VITRO)	01 02 04	0218 HUMAN EXPOS (ACCIDENTAL)	01 02 04	0243 CHEM/PHYS PROP	01 02 04
0204 MUTA (IN VITRO)	01 02 04	0219 HUMAN EXPOS (MONITORING)	01 02 04	0244 CLASTO (IN VITRO)	01 02 04
0205 MUTA (IN VIVO)	01 02 04	0220 ECO/AQUA TOX	01 02 04	0245 CLASTO (ANIMAL)	01 02 04
0206 REPRO/TERATO (HUMAN)	01 02 04	0221 ENV. OCC/REL/FATE	01 02 04	0246 CLASTO (HUMAN)	01 02 04
0207 REPRO/TERATO (ANIMAL)	01 02 04	0222 EMER INCI OF ENV CONTAM	01 02 04	0247 DNA DAM/REPAIR	01 02 04
0208 NEURO (HUMAN)	01 02 04	0223 RESPONSE REQUEST DELAY	01 02 04	0248 PROD/USE/PROC	01 02 04
0209 NEURO (ANIMAL)	01 02 04	0224 PROD/COMP/CHEM ID	01 02 04	0251 MSDS	01 02 04
0210 ACUTE TOX. (HUMAN)	01 02 04	0225 REPORTING RATIONALE	01 02 04	0299 OTHER	01 02 04
0211 CHR. TOX. (HUMAN)	01 02 04	0226 CONFIDENTIAL	01 02 04		
0212 ACUTE TOX. (ANIMAL)	01 02 04	0227 ALLERG (HUMAN)	01 02 04		
0213 SUB ACUTE TOX (ANIMAL)	01 02 04	0228 ALLERG (ANIMAL)	01 02 04		
0214 SUB CHRONIC TOX (ANIMAL)	01 02 04	0239 METAB/PHARMACO (ANIMAL)	01 02 04		
0215 CHRONIC TOX (ANIMAL)	01 02 04	0240 METAB/PHARMACO (HUMAN)	01 02 04		

TRIAGE DATA: NON-CBI INVENTORY

ONGOING REVIEW

SPECIES

TOXICOLOGICAL CONCERN:

USE:

PRODUCTION:

YES

YES (DROP/REFER)

Minnow

LOW

CAS SR

NO

NO (CONTINUE)

Daphnia

MED

DETERMINE

REFER:

HIGH

COMMENTS:

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

UCARE POLYMER 15712-32

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, P. promelas	96h	LC50		4.9	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

UCARE POLYMER 15712-32

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		88.4	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			LOW	NS	NS
CHEMNAME							PHYSTATE
UCARE POLYMER 15712-32							NS
ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS	MELTINGPT	
Bacteria		IC50	>	5000	mg/l	NS	
COMMENTS							
Effect on bacterial inhibition							

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

UCARE POLYMER 15712-41

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, P. promelas	96h	LC50		6.2	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

UCARE POLYMER 15712-41

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		74.3	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			LOW	NS	NS

CHEMNAME

UCARE POLYMER 15712-41

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Bacteria		IC50	>	5000	mg/l

MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		1314621	MODERA	NS	NS
CHEMNAME							PHYSTATE
Vanadium pentoxide							NS
ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS	MELTINGPT	
Bacteria		IC50		42	mg/l	NS	
COMMENTS							
Effect on bacterial inhibition							

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			HIGH	NS	NS
CHEMNAME							PHYSTATE
Triton DF-AZ							NS
ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS	MELTINGPT	
Fathead minnow, P. promelas	96h	LC50		0.7	mg/l	NS	
COMMENTS							
NOEC=0.3mg/l							

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS
CHEMNAME							PHYSTATE
Triton DF-AZ							NS
ORGANISM	DURATION		ENDPOINT	CODE	TOXVALUE	UNITS	MELTINGPT
Daphnia	48h		EC50		2.4	mg/l	NS
COMMENTS							
NOEC=1.3MG/L							

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		95385	HIGH	NS	NS

CHEMNAME

AMINE 220

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, P. promelas	96h	LC50		0.2	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		78955	MODERA	NS	NS
CHEMNAME							PHYSTATE
Chloroacetone							NS
ORGANISM	DURATION		ENDPOINT	CODE	TOXVALUE	UNITS	MELTINGPT
Bacteria			IC50		3	mg/l	NS
COMMENTS							
Effect on bacterial inhibition							

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		4170303	MODERA	NS	NS

CHEMNAME

Crotonaldehyde

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, P. promelas	96h	LC50		2.8	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		4170303	MODERA	NS	NS

CHEMNAME

Crotonaldehyde

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Bacteria		IC50	<	50	mg/l

MELTINGPT

NS

COMMENTS

25mg/l>Inhibition>50 mg/l

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Crude Myrac Aldehyde

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		1.6	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			LOW	NS	NS
CHEMNAME							PHYSTATE
Crude Myrac Aldehyde							NS
ORGANISM	DURATION		ENDPOINT	CODE	TOXVALUE	UNITS	MELTINGPT
Bacteria			IC50		300	mg/l	NS
COMMENTS							
Effect on bacterial inhibition							

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		77736	MODERA	NS	NS

CHEMNAME

Dicyclopentadiene

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, P. promelas	96h	LC50		30	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		77736	MODERA	NS	NS

CHEMNAME

Dicyclopentadiene

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		13	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		77736	LOW	NS	NS

CHEMNAME

Dicyclopentadiene

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Bacteria		IC50	>	200	mg/l

MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		25044013	MODERA	NS	NS

CHEMNAME

Ethyl Isopropenyl ketone

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, P. promelas	96h	LC50		23.1	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		25044013	MODERA	NS	NS

CHEMNAME

Ethyl Isopropenyl ketone

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		16.2	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992		25044013	MODERA	NS	NS

CHEMNAME

Ethyl Isopropenyl ketone

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Bacteria		IC50		37	mg/l

MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Polymer JR400

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		27.8	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Polymer JR400

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead, P. promelas	96h	LC50		2.4	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			LOW	NS	NS

CHEMNAME

Polymer JR400

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Bacteria		IC50		2500	mg/l

MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Polymer LR400

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, <i>P. promelas</i>	96h	LC50		19.7	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			LOW	NS	NS

CHEMNAME

Polymer LR400

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		670	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS
CHEMNAME							PHYSTATE
Silicone 38184 (b)							NS
ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS	MELTINGPT	
Fathed minnow, P. promelas	96h	LC50		1.8	mg/l	NS	
COMMENTS							

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Silicone 38184 (b)

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		9.0	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Silicone 38184 (b)

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Bacteria		IC50		16	mg/l

MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Silicone 38184 (a)

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, <i>P. promelas</i>	96h	LC50		2.8	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Silicone 38184 (a)

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		1.2	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

Silicone 38184 (a)

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Bacteria		IC50		75	mg/l

MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

TERGITOL MIN-FOAM 1X

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		3.5	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

TERGITOL MIN-FOAM 1X

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, <i>P. promelas</i>	96h	LC50		4.0	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			LOW	NS	NS

CHEMNAME

TERGITOL MIN-FOAM 1X

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
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Bacteria		IC50	>	1000	mg/l
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MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

TERGITOL MIN-FOAM 2X

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, P. promelas	96h	LC50		2.6	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

TERGITOL MIN-FOAM 2X

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Daphnia	96h	LC50		1.77	mg/l

MELTINGPT

NS

COMMENTS

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			LOW	NS	NS

CHEMNAME

TERGITOL MIN-FOAM 2X

PHYSTATE

NS

ORGANISM

Bacteria

DURATION

ENDPOINT

IC50

CODE

>

TOXVALUE

1000

UNITS

mg/l

MELTINGPT

NS

COMMENTS

Effect on bacterial inhibition

ENTRY FORM

CAPNUM	LTR	DATE	CBI	CASNO	CONCERN	AI	SOLUBILITY
12233	a	0992			MODERA	NS	NS

CHEMNAME

TERGITOL NP-14

PHYSTATE

NS

ORGANISM	DURATION	ENDPOINT	CODE	TOXVALUE	UNITS
Fathead minnow, <i>P. promelas</i>	96h	LC50		1.6	mg/l

MELTINGPT

NS

COMMENTS